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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,631	08/03/2006	Gerald Adams	J3713(C)	5500
201 7590 11/25/2008 UNILEVER PATENT GROUP 800 SYLVAN AVENUE AG West S. Wing ENGLEWOOD CLIFFS, NJ 07632-3100			EXAMINER SIMMONS WILLIS, TRACEY A	
			ART UNIT	PAPER NUMBER
			1619	
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			11/25/2008 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/551,631

**Applicant(s)**

ADAMS ET AL.

**Examiner**

TRACEY SIMMONS WILLIS

**Art Unit**

1619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date 06012006; 01312008; 08282008
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status of the Claims***

Claims 1-16 are pending and are the subject of this Office Action. This is the first Office Action on the merits of the claims.

### ***Priority***

This application is a national stage entry of PCT/EP04/02852 filed on March 18, 2004. This application claims foreign benefit of European Patent document EP 03252063 filed on April 1, 2003. The earliest U.S filing date afforded the instantly claimed invention is March 18, 2004.

### ***Information Disclosure Statement***

Three information disclosure statements (IDS) submitted on June 1, 2006, January 31, 2008, and August 28, 2008 were filed before the mailing date of the first Office Action on the merits. The submission is in compliance with the provisions of 37 CFR 1.97 and 37 CFR 1.98. Accordingly, the information disclosure statements are being considered by the examiner.

Examiner notes that one prior art entry on June 1, 2008 contains 2 documents, PCT/GB00/02120 (WO/01/07496) in which only the even pages are entered and PCT/IB98/00784 (WO/98/53794) in which only the odd pages are entered.

### ***Claim Objections***

Claim 11 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 10. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 16 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Claim Rejections - 35 USC § 112 second paragraph***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112 second paragraph for the following reasons: instant claim 16 provides for the “use of a composition according to claim 1 for the cosmetic treatment of hair”. However, since the claims do not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 7, 9, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by International Patent Application Publication No. WO/1994/02112 (Mudge et al.).

Instant claim 1 cites a hair care composition comprising an ABA block copolymer where A represents poly(aminoalkylmethacrylate) blocks and B represents ethylenically unsaturated carboxylate, the copolymer is in a cosmetically acceptable diluent or carrier.

Mudge et al. teach emulsion polymers used in hair fixatives. The monomers used for the polymers include vinyl esters of C<sub>3-12</sub> carboxylic acids [page 4, line 22], which meets the limitation on component B, and aminoalkyl esters of acrylic acid [page 5, line 3], which meets the limitation of component A. The polymers are diluted with water [page 5, line 18], an acceptable diluent. This meets the limitation of claim 1.

Instant claim 3, dependent on claim 1, further cites the B group to be vinyl acetate. Mudge et al. disclose the use of vinyl acetate [page 4, line 24] as a preferred monomer in the invention, meeting the limitation of the claim.

Instant claim 7, dependent on claim 1, further cites the polymer to be soluble in water, ethanol or mixtures thereof.

As stated above, Mudge et al. teach that the polymer is soluble in water.

Instant claim 9, dependent on claim 1, further cites the composition to be a hair styling composition.

Mudge et al. teach a hair fixing composition that is used to present hold on the hair [page 6, lines 20-21]. One of ordinary skill in the art at the time of the invention would have determined a hair fixing composition to be a type of hair styling composition as it can provide a certain level of hold to a hairstyle. This meets the limitation of the claim.

Instant claim 15, cites a method of treating hair comprising applying the composition described in claim 1.

Mudge et al. disclose a method of testing the fixative by spraying the formulation onto hair, meeting the limitation of the claim.

Claims 1-3, 7-8, and 13-14 are rejected under 35 U.S.C. 102(b) as being anticipated by International Patent Application Publication No. WO/2002/28357 (Frechet, et al.).

Instant claim 1 cites a hair care composition comprising an ABA block copolymer where A represents poly(aminoalkylmethacrylate) blocks and B represents ethylenically unsaturated carboxylate, the copolymer is in a cosmetically acceptable diluent or carrier.

Frechet et al. teach hair styling compositions comprising block copolymers for treatment of hair [page 1, first paragraph]. The copolymer as taught by Frechet et al. is an ABA block copolymer [page 7, mid-page]. Monomers used for the copolymers are ethylenically unsaturated acrylic and methacrylic esters [page 14, mid-page], and amides from N,N-dialkylamino disubstituted methacrylic acid [page 15, top of page]. The copolymer is soluble in water, an acceptable diluent. This meets the limitation of claim 1.

Instant claim 2, dependent on claim 1, further cites the A polymer to be poly(2-dimethylamino)ethyl methacrylate blocks.

Freshet et al. teach the monomers such as N,N-dimethylaminoethyl methacrylate [page 17, mid-bottom of page], meeting the limitation of the claim.

Instant claim 3, dependent on claim 1, further cites the B group to be vinyl acetate.

Freshet et al. teach the monomers such as vinyl acetate [page 18, mid-top of page], meeting the limitation of the claim.

Instant claim 7, dependent on claim 1, further cites the polymer to be soluble in water, ethanol or mixtures thereof.

Frechet et al. further teach the copolymer being soluble in water, ethanol, or mixtures of both [page 9, mid-page], meeting the limitation of the claim.

Instant claim 8, dependent on claim 1, further cites the composition to comprise a fragrance or perfume.

Frechet et al. teach that the composition can include a fragrance or perfume [page 30, mid page].

Instant claim 13, dependent on claim 1, further cites the composition to comprise up to 30 weight percent of a propellant.

Frechet et al. teach a propellant used in the composition in amounts ranging from 3 to 30 weight percent [page 32, mid-page]. This range falls within the range cited in the claim and anticipates the range cited.

Instant claim 14, dependent on claim 1, further cites the composition to be a gel or cream with 0.01 to 10 weight percent structurant or thickener.

Frechet et al. teach structurants or thickeners used in the composition in a range of 0.01 to 10 weight percent [page 32, bottom of page]. This meets the limitation of the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over International Patent Application Publication No. WO/2002/28357 (Frechet, et al.).

Instant claims 5 and 6 are each dependent on claim 1 cited above, and further cite the molecular weight of the A block to be from 5,000 to 500,000 (claim 5) and the molecular weight of the B block to be from 1,000 to 100,000 (claim 6).

The teachings of Frechet et al. are as discussed above. Frechet et al. also teach the core polymer's weight to range from 150-20,000,000 and the flanking polymer's molecular weight to range from 80-750,000 [page 10, mid-page].

Both ranges encompass the cited ranges and one of ordinary skill in the art at the time of the invention would have found it *prima facie* obvious to optimize the molecular weights of the polymer blocks to obtain the desired hydrophilic/hydrophobic characteristic.

Instant claim 4 cites the molecular weight of the total polymer to be from 5,000 to 500,000.

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,030,512 (Papantoniou et al.).

Instant claim 4, dependent on claim 1 cited above, further cites the molecular weight of the total polymer to be between 5,000 and 500,000.

The teachings of Frechet et al. are as discussed above. While Frechet et al. teach the molecular weights of the individual block polymers, the overall molecular weight of the polymer is not taught.

Papantoniou et al. teach hair lacquer or setting lotion comprised of bi-sequenced polymers in which sequence A and B are used to form the polymer. Sequence A includes 2-(N,N-dimethylamino) ethyl methacrylate and sequence B includes styrene [column 3, lines 24 and 30] with water as a carrier [column 4, lines 29-30], meeting the limitation of claim 1.



The overall molecular weight of the bi-sequenced polymer ranges from 1,000 and 1,000,000 [column 4, lines 10-11].

One of ordinary skill in the art at the time of the invention would have been motivated to optimize the molecular weight of the polymer depending on the type of composition made (lotion versus lacquer), meeting the limitation of claim 4.

Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over International Patent Application Publication No. WO/1994/02112 (Mudge).

Instant claim 10, dependent on claim 1 cited above, further cites the polymer to be present in range of 0.1 to 10 weight percent.

The teachings of Mudge et al. are as discussed above. Mudge et al. teach the polymer in range of 2-15 weight percent of the composition [page 2, lines 16-17]. This range overlaps with the range cited, and one of ordinary skill in the art at the time of the invention would have found it *prima facie* obvious to optimize the amount of polymer present in the composition to obtain the desired hold and aesthetics as needed.

Instant claim 12, dependent on claim 1, further cite the composition to comprise a surfactant in range of 0.01 to 7.5 weight percent.

Mudge et al. teach the hair fixatives comprising up to 4 weight percent of surfactant [page 5, line 15]. This overlaps with the cited range. One of ordinary skill in the art at the time of the invention would have found it *prima facie* obvious to optimize the amount of surfactant to maximize the dispersion of the polymers contained within the composition.

### ***Conclusion***

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TRACEY SIMMONS WILLIS whose telephone number is (571)270-5861. The examiner can normally be reached on Mondays to Fridays from 8:30 am to 5:30 pm. The examiner can also be reached on alternate Fridays from 8:30 am to 12:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached at (571)272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/T. S.W./  
Examiner, Art Unit 1619

/MP WOODWARD/  
Supervisory Patent Examiner, Art Unit 1615